JOHN B. WARREN

Physicist, Instrumentation Division
Brookhaven National Laboratory
Upton, New York, 11973
631-344-4203, (5773) FAX
Internet: warren@bnl.gov

EDUCATION

Ph.D., Materials Science & Eng., University of Florida, 1977 Advisor:J.Hren)
M. Eng. Materials Science & Eng., University of Florida, 1969
B.S. Metallurgical Eng., Cornell University, 1967

PROFESSIONAL EXPERIENCE

1978-present Assoc. Physicist and Physicist, Brookhaven National Laboratory
977-1978 Engineer, Philips Electronic Instruments, Mahwah, NJ

RESEARCH INTERESTS

Microfabrication technology, nanotechnology, analytical electron microscopy.

CURRENT ACTIVITIES

Dr. Warren is the manager of the Microfabrication Laboratory at the Instrumentation Division of Brookhaven National Laboratory. This lab began in 1989 to assist the Accelerator Test Facility in the fabrication of microstructure arrays used to study novel acceleration mechanisms with a laser linac. Expertise gained in this are has since been used to fabricate microstructures, micrsosensors, and microactuators for many investigators in botha acadamia and industry. Work includes fabrication of infrared filter arrays for NASA, high resolution masks for positron microscope studies by Brandeis University, and collaborations with Lockheed-Martin and Standard MEMS Inc. to develop multi-axis accelerometers and high aspect ratio microactuators, development of electron beam lithography in support of nanotechnology at BNL, and collaboration with SUNYSB faculty on semiconductor-superconductor nanoscale devices and the mechanics of nanoscale structures.

REPRESENTATIVE AWARDS AND CONTRACTS

BNL Laboratory Directed Research & Development Program: 'Development of Deposition Methods For Micromechanics".

BNL Cooperative Research & Development Act Contract with Loral Control Systems BNL-C-94-09, " High Aspect Ratio Microfabrication of Multi-axis Micro-accelerometer".

BNL Laboratory Cooperative Research & Development Act Contract with Standard MEMS, Inc., BNL-C-98-10, "High Aspect Ratio Microfabrication Using UV Lithography".

BNL Laboratory Directed Research & Development Program
"Taskforce on Nanoscale Science, Engineering, and Technology 01/27/2000 (w. D. O. Welch et al.).

DOE Proposal: "Charge Injection and Transport in Nanoscale Materials" (w. C. Creutz et al.).

BNL Laboratory Directed Research & Development Program, "Orientation Dependant Etching of Quantum Wires Using Orientation Dependent Etching of Silicon".

RECENT PROFESSIONAL ASSOCIATIONS, SERVICE AND HONORS

Subject Editor, Journal of Microelectromechanical Systems; Reviewer: DOE SBIR program, MRS, IEEE, EMSA